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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/674,642

09/30/2003

Frank Eliot Levine

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08/24/2006

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EXAMINER

CHOU, ANDREW Y

ART UNIT

PAPER NUMBER

2192

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/674,642

Applicant(s)

LEVINE ET AL.

Examiner

Andrew Y. Chou

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2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09/30/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 03/03/2006, 06/24/2006, 6/23/2006, 6/15/2006, 5/26/2006, 4/25/2006, 3/27/2006, 2/14/2006, 2/14/2006, 1/30/2006, 1/9/2006, 7/11/2005, 9/30/2003
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-21 have been examine. Claims 1, 10, and 18 are independent claims.  
The priority date recognized for this application is 09/30/2003.

### ***Information Disclosure Statement***

2. The Office acknowledges receipt of the Information Disclosure Statements filed on 08/30/2006, 06/26/2006, 06/23/2006, 06/05/2006, 05/26/2006, 04/25/2006, 03/27/2006, 02/14/2006, 01/30/2006, 01/09/2006, 07/01/2005, 09/30/2003. They have been placed in the application file and the information referred to therein has been considered by the examiner.

### ***Oath/Declaration***

3. The Office acknowledges receipt of a properly signed oath/declaration filed on 09/30/2003.

### ***Specification***

4. Status of cross reference to related application listed on pages 1-2 should be update. Appropriate correction is required,

### ***Claim Objections***

5. Claims 3, 12, and 20 are objected to because of the following informalities: The phrase "each a timer expires" should instead be replaced by – each time a timer expires --. Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

6. Claims 18-21 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.

Claims 18-21 are rejected under 35 U.S.C 101 because the claimed invention recites "a computer-readable medium" defined to include "transmission-type media" which includes wireless transmission media as mentioned in page 64, lines 15-30 of the applicant's specification. Thus, under the Interim Guidelines such media do not fall within one of the four statutory classes of 35 U.S.C 101 Annex IV (c). Therefore, the above claim is non-statutory. For further information, see Interim Guidelines for Examination of Patent Application for Patent Subject Matter Eligibility (signed 26Oct2005) –OG

Cite: 1300 OG 142.

⟨<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>⟩

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 1-7, 9-16, and 18-21 are rejected under 35 U.S.C. 102(a) as being anticipated by Spivey US 2003/0066055 A1 (hereinafter Spivey).

**Claim 1:**

Spivey discloses a method in a data processing system for monitoring the execution a compiled program having a set of groupings, the method comprising:

selecting a grouping from the set of groupings for the compiled program to form a selected grouping (see for example page 3, [0038], Fig. 1, item a, and related text);

associating a set of indicators with instructions in the selected grouping within the set of grouping, wherein a set of indicators provides data on the execution of the instructions by a processor executing the instructions (see for example page 3, [0038], and related text);

and

executing the compiled program, wherein data is generated upon encountering an indicator in the set of indicators (see for example page 3, [0038], [0040], lines 4-8);

and

collecting the data (see for example page 3, [0040], page 4, [0048]).

**Claim 2:**

Spivey further discloses the method of claim 1 further comprising:

repeating the selecting, associating, executing, and collecting steps for all groupings in the set of groupings (see for example page 3, [0041]).

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**Claim 3:**

Spivey further discloses the method of claim 2 further comprising:

performing the repeating step each time a timer expires (see for example page 4, [0049], "timer").

**Claim 4:**

Spivey further discloses the method of claim 1 further comprising:

responsive to identifying an instruction in an instruction cache for execution, determining whether an indicator from the set of indicators is associated with the instruction (see for example page 3, [0043], FIG. 2, and related text); and

counting each event associated with execution of the instruction if the indicator is associated with the instruction from the data (see for example page 3, [0043]).

**Claim 5:**

Spivey further discloses the method of claim 1, wherein the data includes at least one of a number of times each instruction on the selected grouping has been executed and a number of visits to the selected grouping (see for example page 4, [0051]).

**Claim 6:**

Spivey further discloses the method of claim 1, wherein the set of indicators are located in a shadow memory.

**Claim 7:**

Spivey further discloses the method of claim 1, wherein the data provides an identification of a usage of routines in the compiled program.

**Claim 8:**

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Spivey further discloses the method of claim 1, wherein the method is located a scanning daemon.

**Claim 9:**

Spivey further discloses the method of claim 1, wherein the grouping is selected from one of a page, a subroutine, or a module a program (see for example page 3, [0038], "subroutines").

**Claim 10:**

Claims 10-16 are data processing system versions of the claimed method steps discussed in claims 1-7 above. Thus, accordingly these claims would also be anticipated by Spivey.

**Claim 18-21:**

Claims 18-21 are computer program products of the claimed method steps discussed in claims 1-4 above. Thus, accordingly these claims would also be anticipated by Spivey.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 8 and 17 are rejected under 35 U.S.C 103(a) as being unpatentable over Spivey US 2003/0066055 A1 (hereinafter Spivey) in view of French et al. US 2003/0131343 A1 (hereinafter French).

**Claim 8:**

Spivey does not disclose the method of claim 1, wherein the method is located in the scanning daemon. However, French in the same analogous art of monitoring program execution discloses a method of claim 1, wherein the method is located in a scanning daemon (see for example page 5, [0054]). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Spivey to include such a method wherein the method is located in a scanning daemon. One would be motivated to do so to take advantage of the additional functionality provided by locating the method in a scanning daemon (see for example page 5, [0054], lines 8-16).

**Claim 17:**

Claim 17 is a data processing system version of the claimed method step discussed in claim 8 above. Thus, accordingly, this claim would also be obvious.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Chou whose telephone number is (571) 272-6829. The examiner can normally be reached on Monday-Friday, 8:00 am – 4:30 pm. If



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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached on (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

AYC



TUAN DAM  
SUPERVISORY PATENT EXAMINER